

Claims

1. Device for the non-contact measurement of the position of
5 the teeth of a workpiece with pre-cut teeth, which is set
up for fine machining on the work spindle of a gear
finishing machine, by means of a retractable measuring
probe, wherein the measuring probe is arranged on a holder
which constitutes a member of a parallelogram linkage, the
10 parallelogram linkage possessing a base member opposite
the holder for the rigid connection to a machine bed or a
work spindle housing.
2. Device according to claim 1, wherein the swivel plane of
15 the parallelogram linkage is parallel to the axis of
rotation of the workpiece or coincides with the same.
3. Device according to claim 1 or 2, wherein the holder is
swivellable through a fixed given angle from stop to stop.
- 20 4. Device according to any of the claims 1 to 3, wherein a
rotary drive is provided for the swivelling of the holder,
operated hydraulically, pneumatically or by electric
motor.
- 25 5. Device according to any of the claims 1 to 4, wherein the
rotary joints of the parallelogram linkage consist of non-
clearance pre-loaded roller bearings.
- 30 6. Device according to any of the claims 1 to 5, wherein the
parallelogram linkage possesses two rotary joints for each
swivel axis, the distance between which corresponds at

least with the length of the shorter parallelogram members.

7. Device according to any of the claims 1 to 6, wherein the
5 measuring probe is arranged for displacement and clamping parallel to its axis.

8. Device according to any of the claims 1 to 7, wherein the
10 measuring probe is arranged in a holder column for displacement and clamping at right angles to its axis.

9. Device according to claim 8, wherein the holder column is
arranged for displacement and clamping in the holder at
right angles to the axis of the measuring probe.

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10. Device according to any of the claims 1 to 9, wherein the
holder is swivel-connected to the base member via members
and rotary joints.